The description of the lake beds above mentioned suggests a recurrence to a note in a recent number of SCIENCE. The lower beds, 200 feet of well-indurated clays, are covered with sandstones and conglomerates, 'much cross-bedded and greatly resembling the Pliocene lake beds so common in the mountain valleys of Montana.' The upper beds range from marls to conglomerates, varying rapidly in kind and composition. Is it not probable that these variable upper beds are largely of fluviatile origin?

SCENERY OF YELLOWSTONE PARK.

'SOME geological causes of the scenery of Yellowstone National Park' are discussed by A. R. Crook (Amer. Geol. XX., 1897, 159–167), but with inadequate attention to the action of ordinary erosive processes. Mention is briefly made of the uplift of various mountains, but their extensive denudation into existing forms is hardly referred to, except under the head of glacial action, which is given an excessive value. The extreme youth of the Yellowstone Canyon in contrast to the maturely sculptured valleys of its headwaters, one of the most striking features of the Park, finds no mention. Although punctuated here and there by geyser basins and surrounded by a frame of bold mountains, the monotony of the scenery over large rhyolite areas will disappoint many visitors who read exclamatory descriptions of this 'Wonderland of America.' The bicycle as a means of travel in the Park deserves notice to intending visitors of the hardier kind.

THE PHLEGRÆAN FIELDS.

THE Oxford University Geographical Studentship, held in 1895–96 by R. T. Günther, leads to an essay under the above title as the result of extended field work (London Geogr. Journ., X., 1897, 412–435). The area studied lies west of Naples—a region of 'crater-like hills and hollows, volcanic ridges and trachytic rocks,' known as the *Campi flegræi*, or Burning fields. It is associated with level stretches of fertile volcanic soil, spread by water or other agency and known as the *Campagna felice*. Volcanic activity, as a cause of topographic features, has here been manifested in a slow outwelling of fluid materials, forming heaps or streams of lava; or in explosive discharges, forming craters surrounded by circular ring-walls of débris. The older volcanoes are much altered by stream and marine erosion, as well as by later volcanic action. Twenty-six craters more or less completely preserved are described and classified according to relative age. The later craters are smaller and nearer the shore than the older ones.

In view of the well-determined occurrence of calderas, as a result of destructive volcanic action in contrast to the constructive action that produces typical craters, it is to be regretted that no consideration is given to the differences between these two serviceable types of volcanic forms.

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CURRENT NOTES ON ANTHROPOLOGY.

THE PRESENT POSITION OF ETHNOGRAPHY.

THERE has lately been published, from the pen of Dr. Andrew Lincke, an interesting survey of the present position and recent contributions to the science of ethnography. Although his main attention is directed to the area of Germany, and particularly Saxony, he has also made an examination of what has lately been done for Asia and other parts of the world. His pamphlet of ninety-two pages is much more than a catalogue of books and papers. He undertakes to assign their respective value to those which he has himself read, and, although his notices are necessarily brief, they will be found useful indications to the reader and student. Dr. Lincke is himself well

known as a writer on folk-lore, and to this branch he devotes considerable attention in his essay. He does not concede much space to American writers or subjects, but for this omission the explanation in the preface relating to the difficulties of exhausting so wide a field is sufficient.

His paper, entitled 'Ueber den gegenwärtigen Stand der Volkskunde,' is published by the *Verein für Erdkunde*, in Dresden, and presumably may be obtained from it.

THE END OF THE HUMAN RACE.

One of his learned and thoughtful articles is contributed on this subject by the Marquis de Nadaillac in a recent number of the *Correspondant*. Making anew the calculation of the increase of population as compared with the increase of the food supply, he reaches the gloomy conclusion that in a few centuries there will inevitably be too little food to supply all the mouths. He compares the statistics of most civilized nations, and they appear to confirm his apprehensions. For instance, Russia alone, at its present rate of births, will in one hundred years be obliged to feed eight hundred million persons! What, he asks, can stem this overwhelming tide of population? He gives up the problem, and says that we must leave it to God, a solution which is more creditable to his piety than to his position as a scientist. The real solution is to educate men and women to the point where they will not recklessly produce offspring; nor yet ruthlessly prevent them, as is the case now in some departments of France, where the population is actually diminishing, although the wealth is above the average.

Unfortunately, modern prejudice stands in the way of a fair and full discussion of this solution.

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NOTES ON INORGANIC CHEMISTRY.

The *Berichte* for September 27th contains a description by Emerich Szarvasy, of Budapest, of two new salts formed by the action of carbon dioxide and of sulfur dioxide on a solution of magnesium methylate. The first compound is a methyl-magnesium carbonate $(CH_3)_2Mg(CO_3)_2$ and may be looked upon as a methyl salt of magnesium bicarbonate, but unlike the latter, which decomposes on evaporating its solution, the methyl salt is comparatively stable, and its solution in methyl alcohol can be boiled without decomposition. If sulfur dioxid is used in the place of carbon dioxid the methyl magnesium sulfite is formed, which is also stable. The compounds may also be looked upon as magnesium salts of methyl-carbonic acid and methyl-sulfurous acid, and show the great resemblance in many respects existing between the carbonates and sulfites.

The chemical world has great occasion to deplore the untimely end of Victor Meyer, and many lines of investigation begun by him, but not completed at the time of his death, will doubtless be for the present abandoned, while others may be carried on by his pupils and assistants, but will suffer for the lack of his guiding hand. One of his great works was the determination of vapor density at high temperatures, and while he had worked as high as 1,500°, and, perhaps, a little higher, he had entered upon investigations which would enable him to work above 2,000°. The most difficult part of the problem is to get a vessel to contain the gas, which will stand the temperature and at the same time be gas-tight. The first steps in this work are described in the last *Berichte*. The only material found which would satisfactorily withstand the heat of the furnace used, which was fired by a graphite burning in a stream of oxygen, was magnesia. This did not fuse, but when pure was very porous. A nat-